

**NATIONAL DISASTER PREPAREDNESS
TRAINING CENTER**
AT THE UNIVERSITY OF HAWAII

TRAINING NEEDS ASSESSMENT REPORT
MARCH 2010





NDPTC MISSION STATEMENT

Uniquely positioned geographically and culturally, the National Disaster Preparedness Training Center at the University of Hawai'i Mānoa will develop and deliver disaster preparedness training to governmental, private, and nonprofit entities, incorporating urban planning with an emphasis on community preparedness and at-risk populations.

As a member of the National Domestic Preparedness Consortium, the NDPTC is a DHS/FEMA training partner dedicated to providing critical all-hazards training throughout the United States and its territories with an emphasis on natural hazards and island and coastal communities.

Report Prepared by:

Dolores Foley, PhD
Department of Urban &
Regional Planning
University of Hawai'i at Mānoa

Graduate Assistants:

Katie Ersbak
Saiful Momen



TABLE OF CONTENTS

1.0	EXECUTIVE SUMMARY	1
2.0	DATA AND METHODS	2
2.1	Sample	2
2.2	Survey Instrument	3
2.3	Interviews and Focus Groups	4
3.0	RESULTS	5
3.1	Demographics	5
3.2	Training Preferences and Delivery	5
3.3	Training Certifications	6
3.4	Training Sources	7
3.5	Training Needs	8
3.6	Target Capabilities	10
3.7	Focus Groups and Interviews	13
4.0	DISCUSSION: PRIORITY AREAS FOR COURSE DEVELOPMENT	15
4.1	Natural Hazard Awareness	16
4.2	Communication, Coordination and Collaboration	17
4.3	Community Resilience	18
5.0	CONCLUSION	21
6.0	ENDNOTES	22
7.0	APPENDIX A: QUESTIONNAIRE	23

LIST OF FIGURES

Figure 1 - Importance of Certification or Credit	6
Figure 2 - Training Needs	8
Figure 3 - Perceived Level of Preparedness by Location	9
Figure 4 - Level of Confidence for Common Target Capabilities Deemed Important for Performance	11
Figure 5 - Level of Confidence for Respond Mission Target Capabilities Deemed Important for Performance	12
Figure 6 - Level of Confidence for Common, Prevent Mission and Protection Target Capabilities Deemed Important for Performance	13

I.0 EXECUTIVE SUMMARY

The National Disaster Preparedness Training Center (NDPTC) is a new member of the National Domestic Preparedness Consortium (NDPC). The mission of the NDPTC is to develop and deliver disaster preparedness training to governmental, private, and non-profit entities, incorporating urban planning with an emphasis on community preparedness and at-risk populations. In Fall 2009 the NDPTC contracted with the Department of Urban and Regional Planning at the University of Hawai'i at Mānoa to conduct a training needs assessment in the development of its programs and services. With an initial focus on natural disasters and coastal and island communities, the needs assessment targeted respondents in Hawai'i, Oregon, Washington, Guam, Commonwealth of the Northern Mariana Islands (CNMI), Republic of the Marshall Islands (RMI), Federated States of Micronesia (FSM) and American Samoa. The training needs assessment included a questionnaire, interviews, focus groups and a review of documents and reports.

Summary of key findings from interviews, focus groups and surveys

In recent years natural disasters have become more frequent and have resulted in growing concern about natural disaster preparedness, response and recovery. This concern was apparent in the surveys, interviews and focus groups. One of the key findings was that there are significant unmet training needs in the area of natural disasters. The survey respondents indicated the overall top three general unmet training needs were related to natural disaster response, recovery and protection. The respondents reported a wide spectrum of training needs for natural disasters. These needs range from awareness, risk assessment, mitigation, response and recovery. There was an expressed need to increase awareness of natural hazards at all levels of government and the public. There were great concerns that the public is unprepared and has unrealistic expectations of government's capacity to respond to natural disasters. Many advocated the inclusion of non-governmental organizations and the general public in trainings, and to increase training for public communication and awareness of natural disasters. A number of respondents noted that the "first responders" were in reality the citizens who were "often ill equipped to deal with the disaster."

2.0 DATA AND METHODS

There is no single source for identifying those professionals that respond to natural disasters. Although the primary target of the survey, interviews and focus groups was emergency responders, we were trying to reach other professionals as well. Thus, it was not possible to draw a truly random sample. The sample drawn for this survey was non-random, which can further be described as purposive and convenient.

2.1 Sample

Various sources were utilized to identify potential respondents. Participants were chosen through internet searches of key target audiences and purchased databases. Web searches of key state, city, and county agencies in Oregon, Washington, Hawai'i , CNMI, RMI, American Samoa, Guam, and FSM were also used to identify potential respondents. Results were mixed based upon the availability of information listed on each agency's website. A comprehensive list for all the mayors of Oregon cities was purchased through the League of Oregon Cities, which yielded 242 records. A list of municipal law enforcement, law enforcement training, Bureau of Indian Affairs/Tribal Enforcement, airport and harbor police, state police/highway patrols, general state agencies, federal law enforcement agencies, fire departments, EMS departments, airport and harbor fire/EMS, fire and emergency training and state EMS Directors in the states of Hawai'i , Oregon, and Washington was purchased through the National Public Safety Information Bureau which yielded 1,435 records. Additional participants were chosen through internet searches of key target audiences and purchased databases. Web searches of key state, city, and county agencies in Oregon, Washington, Hawai'i , CNMI, RMI, American Samoa, Guam, and FSM were also utilized.

All materials were mailed via U.S. Postal Service between October and November 2009. The first wave consisted of the initial mailing of the surveys. Approximately two weeks later, as a courtesy reminder of the NDPTC's invitation to participate in the survey, postcards were mailed to all subjects. A total of 2,300 surveys were mailed. Due to mail delays and a low return rate of mailed surveys, listservs by key informants were used to remind and encourage respondents to use the online survey website. Surveys were available online until February 3, 2010. A total of 455 surveys were accepted. There were approximately 225 returned, rejected, waived or refused surveys resulting in a response rate of 21.9%.

2.2 Survey Instrument

The instrument utilized to collect data for this study was a self-report survey that included multiple-choice and ranking questions. The survey questions can be categorized into the following three major areas: (1) basic demographic information, (2) identification of training received and trainings needed, and (3) identification of training delivery experiences and preferences.

The demographic questions asked respondents to provide their formal job title, their area of responsibility (e.g., city, county, etc.), a description of their jurisdiction, their primary responder discipline, and their primary level of responsibility. This information was gathered to gain a better understanding of the roles and responsibilities of the respondents. The sample was primarily comprised of senior management level staff that indicated that their primary area of responsibility was at the county level.

The survey also included questions designed to gather information about the types of homeland security related training that respondents received within the 24 months prior to the administration of the survey. Respondents were first provided with a list of training topics based on the Target Capabilities List and asked to indicate what types of training they had received in the past 24 months. This question was designed to reveal the areas in which the respondents have received training.

Three questions attempted to measure unmet training needs. The first question asked respondents to assess their agency's preparedness for major events based on the Department of Homeland Security National Planning Scenarios. Respondents were also asked to indicate the top three areas of training that are most important for a person in their position related to (1) Natural Disaster, (2) Pandemic/Other Health related outbreak, (3) Technological Catastrophe, (4) Terrorism. Respondents were also provided with a list of 29 target capabilities and asked to indicate their level of confidence in performing each task, as well as their perception of the importance of each task to their job function. In comparing the results of these two variables, training needs were revealed. The inclusion of this question allowed for a more thorough understanding of unmet training needs. A copy of the survey questionnaire is included in Appendix A.

2.0 DATA AND METHODS

2.3 Interviews and Focus Groups

Interviews and focus groups to further explore unmet training needs were conducted in Hawai'i , Oregon, Washington, Saipan, Guam and American Samoa. In the period between November 12, 2009 and February 3, 2010, 12 focus groups with 146 participants and 35 interviews were conducted. Staff from the NDPTC identified initial individuals to be interviewed with those individuals identifying other key stakeholders. State emergency management officials and other professionals identified and organized focus groups in their areas. In a focus group session, conversation among participants results in data that paints a portrait of combined local perspectives. A team also travelled to villages in American Samoa affected by the September 2009 earthquake and tsunami and discussed the impact of past training as well as future training needs with government officials, village chiefs, mayors and residents.

3.0 RESULTS

The purpose of this project was to identify training needs for course development. The following sections will highlight the areas that indicate the greatest training needs as expressed through the survey, focus groups and interviews.

3.1 Demographics

The location of the respondents was primarily from Oregon (134), Hawai'i (131), and Washington (121). The majority of the survey respondents were senior managers (49%) within the discipline of emergency management. The primary areas of responsibility were city and county.

3.2 Training Preferences and Delivery

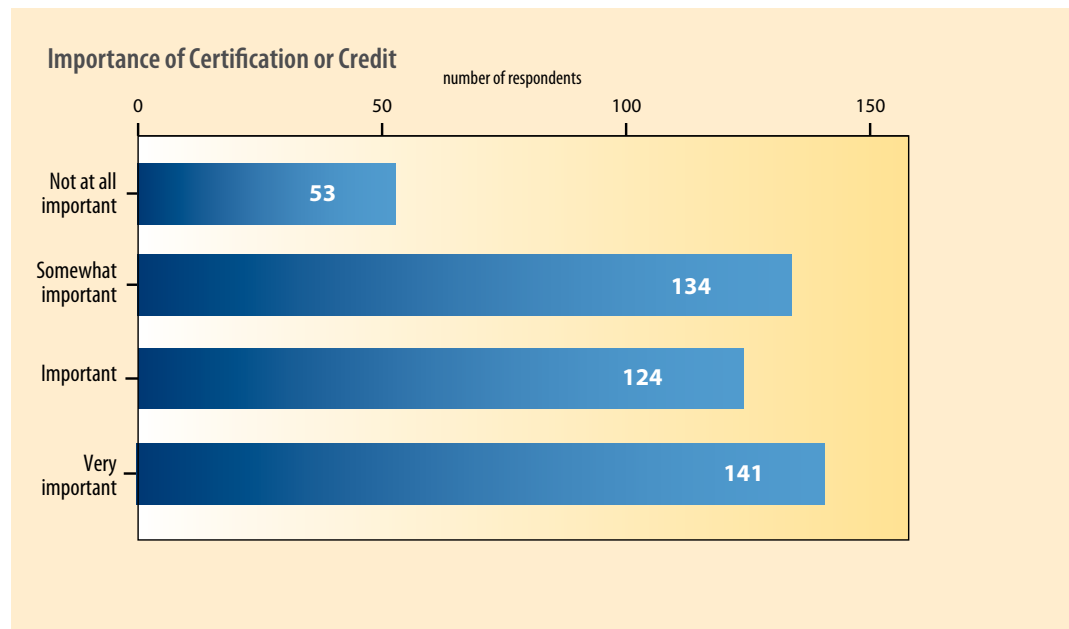
Survey, interview and focus group respondents indicated the importance of receiving credit or certification for training. Fifty percent of the survey respondents indicated that credit was either important or very important. Many respondents in the focus groups indicated that they wanted to get academic credit for training. Respondents indicated that there were few opportunities to pursue professional development in the disaster management field.

Respondents were first asked questions about the type of training they would prefer to attend. Second, respondents were asked to indicate what source(s) they used to identify training courses and what type of training they have received within the last two years. Lastly, survey respondents were asked a series of questions relating to factors and barriers that may have influenced their decision to select or attend training.

3.0 RESULTS

3.3 Training Certifications

Respondents were asked whether certification or credit was required to participate in a training course. Of the respondents surveyed, 42% said they are not required to obtain certificate or credit. In fact, only 5% of respondents said that they are required to obtain college credit. When asked to indicate the type of training(s) you prefer to attend, a significant number of respondents marked that they prefer to attend training that requires no travel (62%). There was little variation among respondents who specified the type of training they prefer to attend, except that the vast majority indicated a preference toward training close to where they conduct business or within their jurisdiction (52%). A smaller percentage of survey takers said they would prefer to attend training out-of-state (36%). When respondents were asked what factors influence their decision to select a training option, 75% of respondents said that their decision to select training is influenced by their interest in the topic, 68% said that location influenced their decision to select a training option, 64% said that they decided to select a training option because it was required, and 63% of respondents were influenced by the dates and times of the training.



The data suggests that the majority of survey respondents are not mandated to receive credit or certification for training courses, however, 58% indicated that certification or credit was important or very important. Many of them prefer to attend training that requires little to no travel. Along with location, interest in the course topic also seems to play a role in the type of training participants choose to attend. These findings were confirmed by many

interview and focus group participants, who also communicated that certification courses and training that did not require travel were seen as more appealing, especially to upper management who might be hesitant to give time off for training that does not result in the awarding of a certification or credential of some sort. Other respondents commented that occupational demands and issues related to back-fill and difficulty being away from work for an extended period of time influenced their training preferences. As such, data suggesting a preference for training with limited travel may in fact be driven by occupational realities rather than personal preference to attend training in state.

3.4 Training Sources

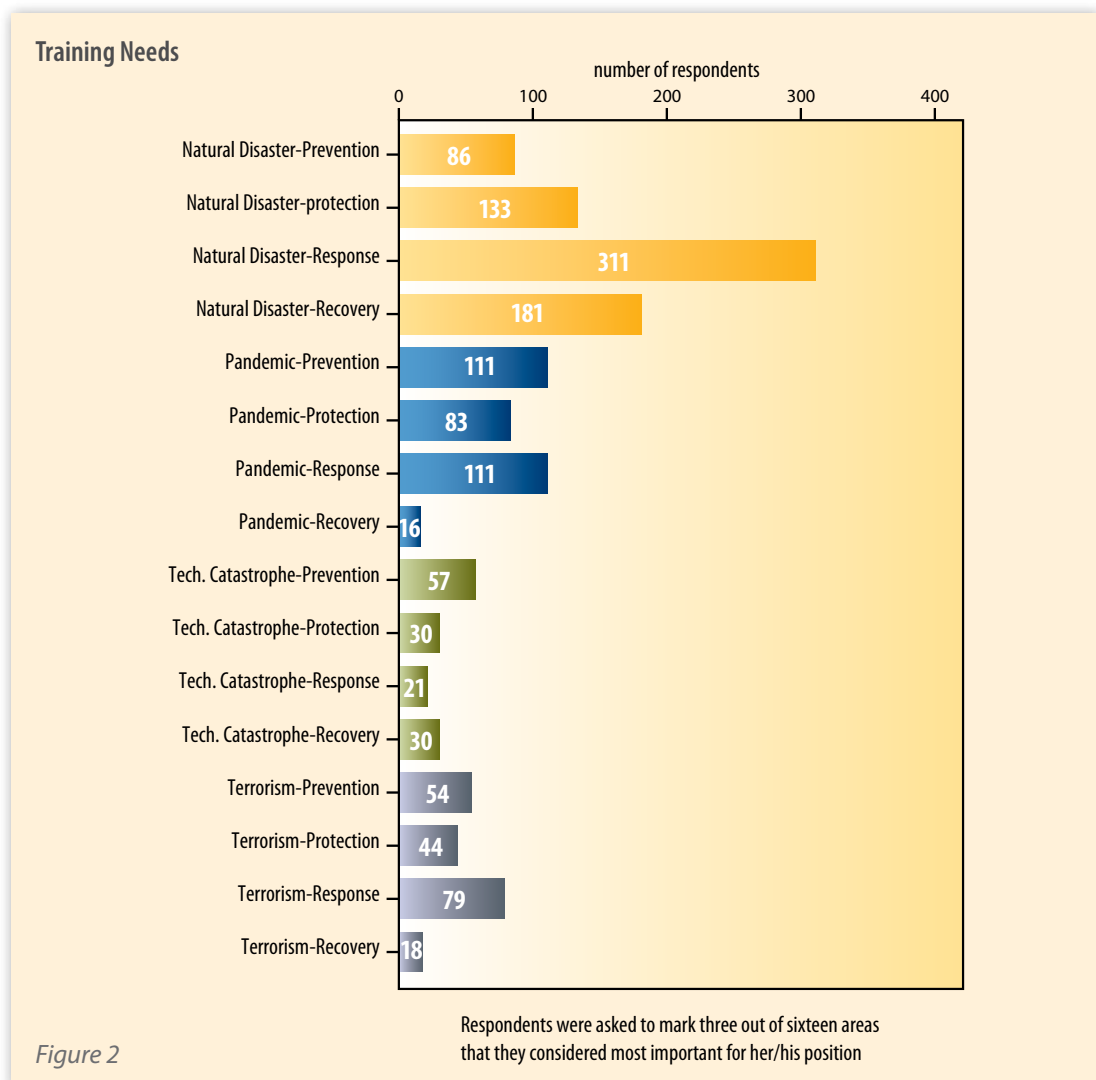
There are a variety of institutions and agencies that provide training on various topics related to emergency management. Respondents were asked to specify which sources they use to identify available training courses. More than half (63%) said they use state agencies to identify training courses and 58% find training courses through the U.S. Department of Homeland Security and FEMA. Other training sources, including professional/trade associations and conferences/expos, were identified as the next best options for training sources. There was little variation between the most used source and the next most used identifier (63%, 58%, 55%, 52%, 50%, 49%). However, very few respondents indicated “other” (5%) or alternative sources of training (other than the ones identified in the survey) and only 27% use local colleges and universities as a source to identify available training courses. In addition, respondents were asked to identify which training providers have provided them with training within the last 24 months. Sixty two percent of respondents said they had received training from a local training provider within the last 24 months, 58% from a federal training provider, 57% from a state training provider and 33% said they received training from a private training provider.

The responses and data seem to indicate that while there is a strong focus on disaster management training at the state and federal level, other entities may be less likely to provide courses relevant to disaster management. These figures coincide with the larger number of respondents who said they utilize these same agencies to identify available training courses. Likewise, because federal, state, and local agencies provide the bulk of courses, as opposed to colleges/universities and private training providers, it would make sense that survey respondents would utilize these agencies for training. Here again may be an opportunity to develop future training courses that correspond with degree and secondary-education programs. In addition, focus group participants expressed that future course development should build upon existing curriculum.

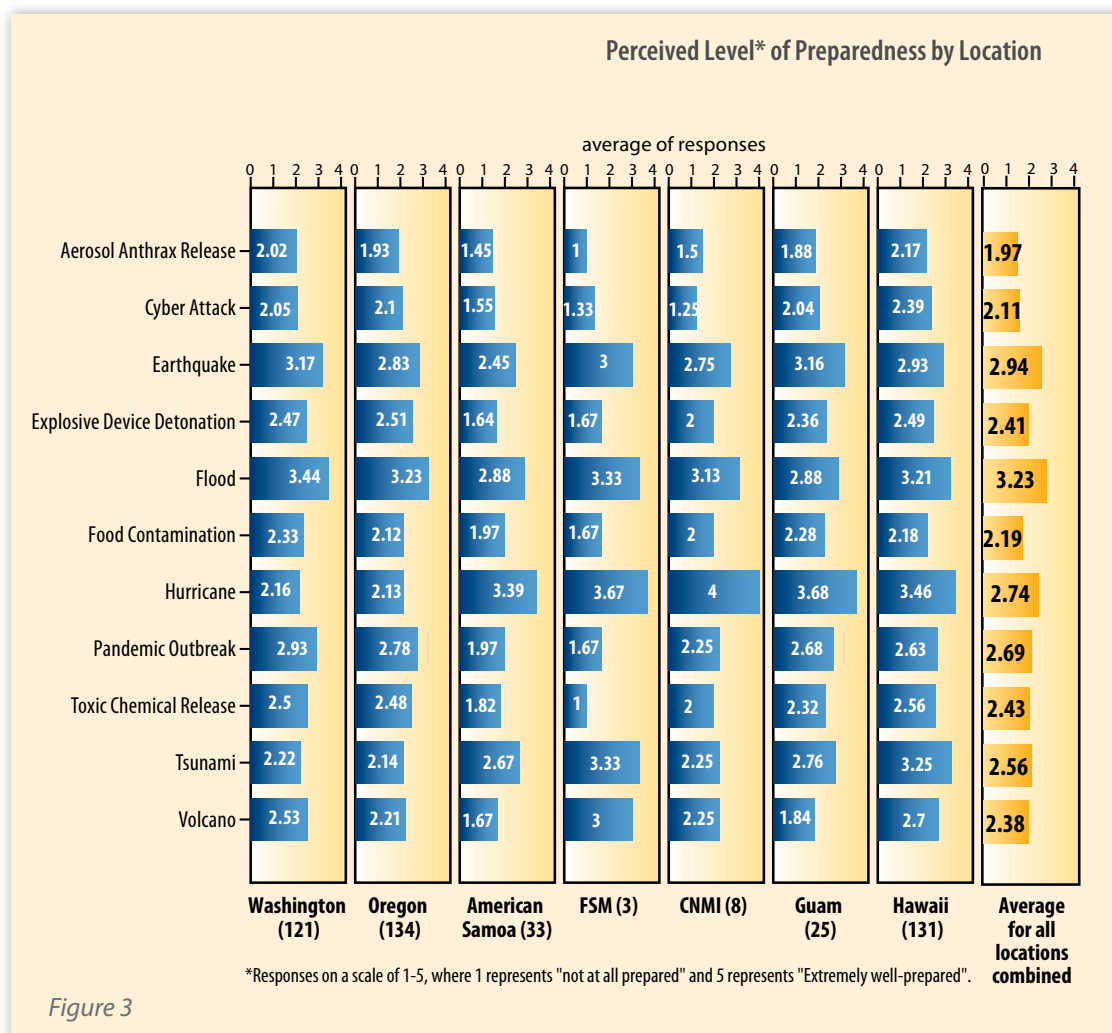
3.0 RESULTS

3.5 Training Needs

One of the significant findings from the survey was the ranking of respondents on the three most important training needs. Respondents were provided with sixteen areas of training and asked to select the three most important for a person in their position. Respondents were asked to prioritize by only ranking three cells by training type (prevention, protection, response and recovery) and theme (natural disaster, pandemic/health related, technological and terrorism). Respondents overwhelmingly indicated natural disaster response and recovery as the most important training areas. (See Figure 2).



Respondents were also asked about their level of preparedness for major events where 1 represented “not at all prepared” and 5 represented “extremely well prepared.” Figure 3 demonstrates a significant range of preparedness by event and by location. It appears that many respondents think that their agency would benefit from targeted training on natural hazards. The interviews and focus groups also indicated a need for training on natural hazards. Although many in American Samoa expressed that they had recently received training on tsunami awareness, they also indicated that more training was needed. There was considerable praise for the DHS training that had been given in the month prior to the September 2009 tsunami. The training was thought to have saved many lives but at the same time their recent experience indicated the need for more training.

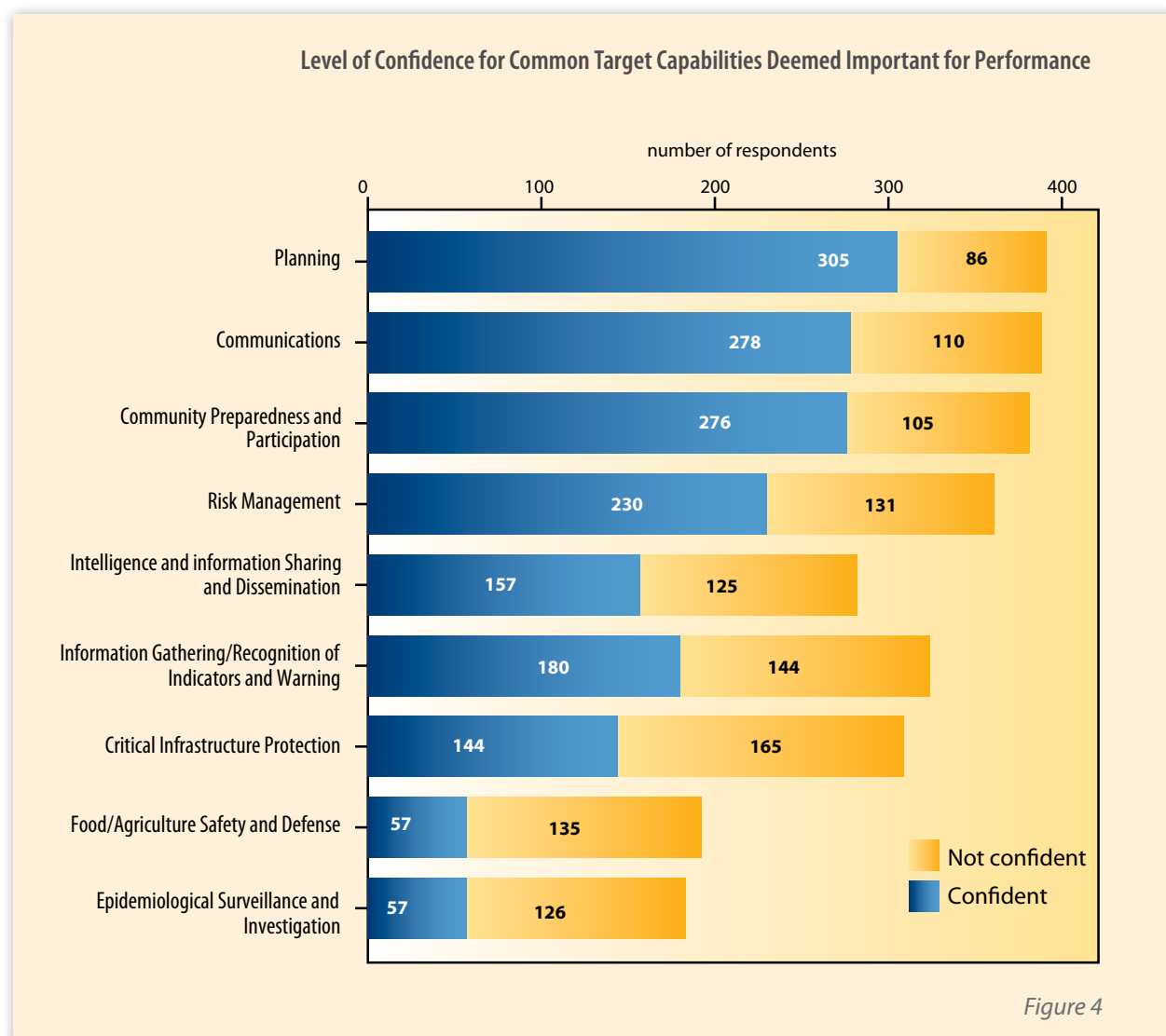


3.0 RESULTS

3.6 Target Capabilities

In Question 20 participants were asked whether they had received training in target capabilities, was it important to possess knowledge and skills related to the capability and their job, and whether they were confident in their ability to perform tasks related to the capability. Survey respondents were not required to rank each target capability in terms of training, need or confidence, and many respondents did not check all categories. Since there were a range of disciplines and areas of responsibility, some areas were not deemed important. There was a total of 29 target capabilities that respondents were asked if they had received training, was it important, and were they confident in their ability to perform tasks related to specific target capability. For the target capabilities in the Response Mission Area many indicated that they had received training and they were confident in their ability. The areas that respondents demonstrated the least confidence were isolation and quarantine, environmental health, citizen evacuation and shelter in place, mass care, critical infrastructure protection, information gathering/recognition of indications and warning, food agriculture safety, and information gathering/recognition of indicators and warning. The area that demonstrated the greatest number of survey respondents indicated an area was both important yet they were least confident was the target capabilities under Recovery Mission Area. The target capability of Economic and Community Recovery demonstrated the highest number of respondents who ranked an area was important and yet they were not confident in their ability to perform tasks.

The following figures indicate the level of confidence that respondents had for those capabilities that they deemed important for their performance. Note that responses do not add up to 455 as respondents were not required to answer every aspect of Question 20 and this measures only those who thought the target capability was important for their job.



3.0 RESULTS

**Level of Confidence for Respond Mission Target Capabilities
Deemed Important for Performance**

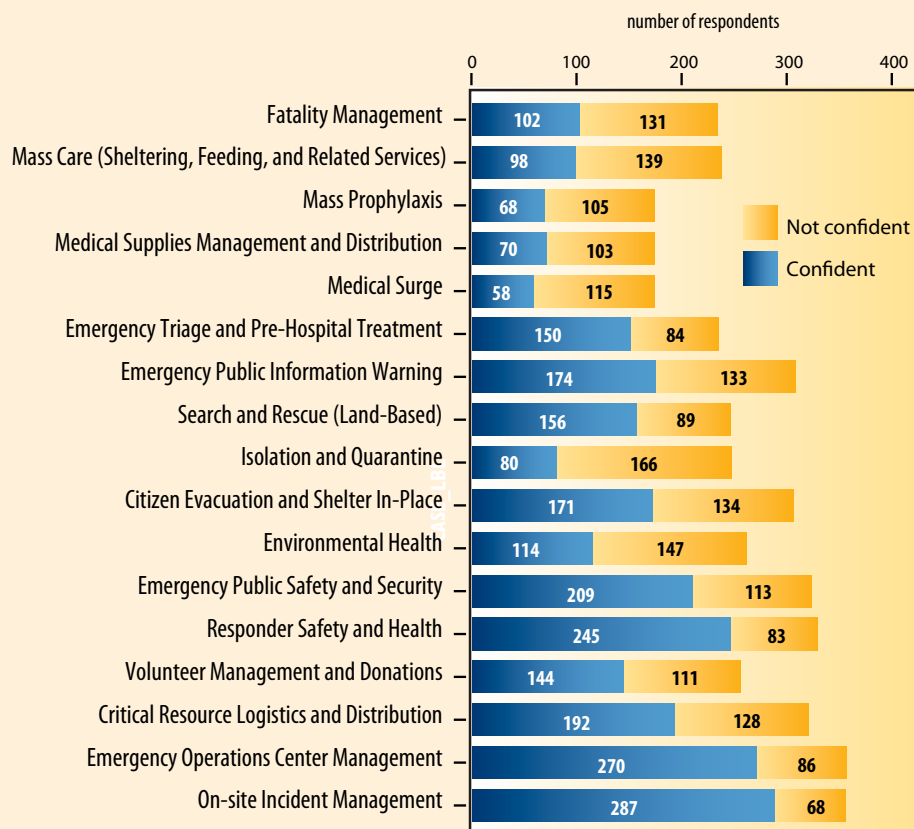
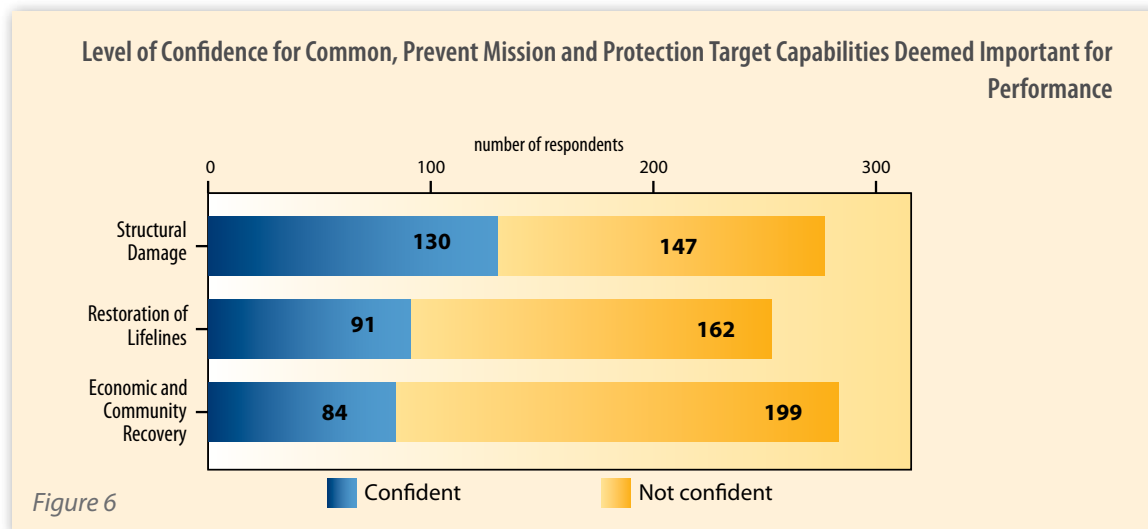


Figure 5



Each category of target capabilities indicates specific areas where respondents indicate a need for training. Many of the areas point to the need to build community resilience (citizen evacuation and shelter in place, mass care, information gathering/recognition of indications and warning, information gathering/recognition of indicators and warning and economic recovery). The greatest need was in the area of Economic and Community Recovery where 70% of those that deemed it important for their job were not confident to perform tasks related to this capability (See Figure 6).

3.7 Focus Groups and Interviews

The training needs identified as relevant to disaster preparedness for natural disasters are vast. They range from the specific to the general. While there were different emphases on training needs from different individuals, groups and locations, there were a number of recurring themes:

- Risk assessment
- Inter/Intra-agency coordination
- Continuity of operations
- Economic and business recovery
- Short and long term mitigation strategies
- Needs of vulnerable populations
- Community preparedness/community resiliency
- Community based disaster management
- Cultural competency
- IT solutions for emergency preparedness
- Vital records management
- Undertaking tabletop and functional exercises
- Hands on training and exercises
- Succession planning
- Shelters and Shelter-in-place
- Port security
- Public education
- Senior leadership/management training
- Region/community specific
- Debris management
- Citizen Corps/CERT volunteer coordination
- Vulnerable and special needs populations

3.0 RESULTS

Current events, as well as the geographical location of the respondents resulted in different emphases on training needs. For example, in December 2009, a new awareness of the need for tsunami training in Guam emerged after Dr. Vasily V. Titov, Director of the National Oceanic Atmospheric Administration's (NOAA) Center for Tsunami Research, delivered the results of NOAA's Pacific Marine Environmental Laboratory's (PMEL) research project, contradicting the widespread belief that Guam was not vulnerable to tsunamis. In post-tsunami American Samoa the need for training of community members became the core issue for many. With communities still devastated and families living in tents, respondents emphasized the need for training directed at recovery, specifically business and economic recovery. The American Samoa disaster as well as a tsunami warning in March also had an immediate impact on professionals and community members raising the awareness for training focused on earthquake and tsunami awareness throughout the region.

Training Barriers and Crosscutting Issues

Respondents also indicated that there are a number of barriers that should be considered. Foremost for many professionals was the lack of funding for backfill. Some respondents indicated that many who would benefit from the training couldn't be included even when there were openings available. This is especially true for training where long distance travel is required. Respondents from the Pacific Island region also indicated that training in Hawai'i would be preferable to travelling to the continental United States. There was also a desire for more training and exercises where participants would have the opportunity to learn and practice together. Many also saw the need for training that was community and region specific with an emphasis on cultural awareness by the trainers. Respondents also noted a need for a clearinghouse. Another barrier in some areas was the turnover of staff leaving untrained professionals in key positions. We also heard that cultural awareness and contextualizing training for communities was needed. Some suggested that there should be cultural competency classes while others emphasized the need to have local cultural experts involved in the development and delivery of courses to promote cultural awareness and appreciation of the local context.

Another crosscutting issue that emerged from interviews and focus groups was the need to address the needs of vulnerable and special needs populations. Groups that are disproportionately affected by natural disasters include at-risk populations facing social, political and economic vulnerabilities; the poor and homeless, the elderly, people with mobility or other physical impairments, children, those who have mental health problems, people with special medical needs, single parents, and those with language barriers. Many respondents stressed that this focus should be considered in the development of every course.

4.0 DISCUSSION: PRIORITY AREAS FOR COURSE DEVELOPMENT

While respondents expressed the need for training in almost every area concerned with natural hazards, the various themes can be grouped into three priority training areas. These categories are natural hazard awareness, communication, and community resilience. Each category encompasses different aspects and levels and would potentially represent multiple course development and delivery venues.

4.0 DISCUSSION: PRIORITY AREAS FOR COURSE DEVELOPMENT

4.1 Natural Hazard Awareness

As natural disasters have become more sensationalized in the news and with recent events, including the Indian Ocean tsunami and Hurricane Katrina, generating a huge amount of media coverage, the issue of natural hazard awareness is quickly becoming a topic of interest for emergency managers and first responders. Feedback from the 2009 needs assessment revealed that natural hazard awareness is a major concern, particularly as it relates to community preparedness, resiliency, and recovery. Workshops, exercises, and educational forums that increase awareness are seen as necessary steps that can foster resiliency and provide communities with the tools needed to prepare for, respond to, and recover from natural disasters with limited intervention from state and federal officials. Enhancing awareness through various mechanisms can play a vital role in reducing what some respondents called “the helplessness factor” by letting the public know that there are certain actions they can undertake on their own to prepare for natural disasters. Developing the local capacity to respond to natural disasters without the support of outside emergency networks was discussed among many of the focus groups as an essential component of community resiliency. In addition, cultivating awareness at the community and individual level is viewed as one way to create built-in mitigation measures that can aid in preparedness and the recovery process. Respondents suggested that awareness could be achieved through pre-planning mechanisms that incorporate hazard mitigation into land use plans prior to the event of a disaster. Similarly, respondents stressed the need to make people aware of their role during a disaster situation by identifying key community leaders, where to go for shelters, and proper preliminary actions to take. Some respondents mentioned that increasing awareness can also be linked to technical jargon and conveying the “science” of natural disasters in terms that can be easily understood by the general public. In addition, respondents pointed out that there are cultural influences that may affect awareness and response during natural hazards, specifically in the Pacific where island communities including American Samoa and Guam have historically had to deal with natural disasters on a regular basis and are arguably better prepared to respond and recover.

While recent events and research has highlighted the need for tsunami awareness and preparedness training, there is also a need for other natural hazard awareness. The low level of awareness of earthquake, volcano and flood also emerged as priority areas for training. There is a need to increase awareness at all levels of government and the public. In Hawai‘i, Washington and Oregon there were great concerns that the public is unprepared and have unrealistic expectations of government’s capacity to respond to natural disasters. But the need to prepare communities and train the public was seen as a major

4.0 DISCUSSION: PRIORITY AREAS FOR COURSE DEVELOPMENT

need even in the communities such as American Samoa, Guam and CNMI where storms are more common and the public is more prepared. Many advocated the inclusion of non-governmental participants and the general public in trainings and to increase training for public communication and awareness of natural disasters overall.

The general consensus from the 2009 needs assessment and comments collected from focus groups and interviews seems to suggest that the public is largely ignorant when it comes to natural hazards. This could significantly impair response and recovery operations during a natural disaster. While the dissemination of information on natural hazards is one way to increase awareness, overall there is a need for pre-planning on the part of government officials and communities to prepare neighborhood plans, design effective evacuation strategies, and properly articulate the risks associated with various natural disasters.

4.2 Communication, Coordination and Collaboration

The need for training to improve coordination and collaboration between agencies and between government agencies, non-profit organizations and citizens came up on numerous occasions. Some stakeholders saw the need for senior leadership training to promote coordination and better collaboration. Some stakeholders saw the need for training that emphasized the correlation between disaster management and other disciplines (coastal zone management, planning etc.).

The responses clearly articulated the need to educate and train the public. There were concerns that there were insufficient efforts to involve and train community organizations and citizens. Many experts are also emphasizing the need to involve communities at multiple levels. Gaynor (2007) argues that we need to understand that “the people who live and work in America’s hometowns, counties, tribes, States, and regions are the people best able to understand their functioning, vulnerabilities, and needs.”¹

There were also concerns about the existing technology. In many cases the advanced technology that currently exists is not available. The human and technological capabilities essential during and after a disaster strikes is underdeveloped. Effective response and recovery efforts depend upon coordinated networks of people and organizations that depend on the skills of participants aided by technological solutions.

One of the key findings of the needs assessment was the judgment that there is a lack of communication and coordination among agencies in the emergency management field.

4.0 DISCUSSION: PRIORITY AREAS FOR COURSE DEVELOPMENT

Many respondents explained that the slow-down in response and recovery operations can be linked to poor communication between sectors and a lack of cross-coordination. In many cases, protocol, process, and standard operating procedures (SOPs) differ among groups and often reflect an agency-specific view of emergency management operations. Participants stressed that cross-coordination and communication needs to be enhanced at every level of emergency management and across all sectors before effective mitigation and response measures can be realized. Many respondents expressed a need for training on continuity of operations within each governing body and across multiple sectors. Large-scale coordination at the regional level is seen as one way to enhance resiliency and ensure success during an emergency situation.

Tactful dissemination of information by the media and emergency managers was noted as a key component of imparting risk and improving response to natural hazards. Addressing alternative methods to communicate risk and actions to be taken in an emergency situation is critical, especially among certain segments of a population who may not have access to a television or radio (i.e. the homeless, non-native English-speakers, etc.).

One way to communicate risk and improve coordination efforts may be through the use of social media. Online tools, including networks such as Facebook and blogger sites like Twitter, were identified as effective platforms for information spreading and achieving widespread recognition. Leveraging social media to mobilize action and inform the public about natural hazards was identified as an important facet of communication. In this sense, training in the area of the use of technology can serve as a supplemental tool, providing community outreach resources and aiding in appropriate response.

4.3 Community Resilience

The concept of community resilience encompasses many of the concerns that were brought up by participants. According to participants, community resilience encompasses mitigation, response, risk assessment, and economic and business recovery. It is clear that while participants stress different priorities for training that would build community resilience, many would agree with the Community Resilience Roundtable on the implementation of Homeland Security Presidential Directive (HSPD) 21, that more emphasis needs to be on the active engagement of citizens and local leaders in efforts to promote community

4.0 DISCUSSION: PRIORITY AREAS FOR COURSE DEVELOPMENT

resilience. Respondents emphasized the need for training and tools for risk assessment, and mitigation for public officials and for citizens. The concern over post disaster economic and business recovery was also a common theme in the interviews and focus groups.

There are different conceptions of community resilience from the respondents as well in the literature:

DHS defines resilience as “a resilient community is one that can withstand an extreme event with a tolerable level of losses and takes mitigation actions consistent with achieving that level of protection.”²

Mileti defines resilience as “a resilient community is one that can withstand an extreme event with a tolerable level of losses and takes mitigation actions consistent with achieving that level of protection.”³

It is clear, as pointed out by Kahan et al., that resilience “spans a wide spectrum and systems, both hard and soft. Hard resilience addresses institutions and infrastructure and refers to their structural, technical, mechanical, and cyber systems qualities, capabilities, capacities, and functions. Soft resilience, in contrast, refers to the aspect of resilience related to family, community, and society, focusing on human needs, behaviors, psychology, relationships, and endeavors.”⁴

Respondents in the focus groups pointed to the need of developing hard and soft resilience but the emphasis for most respondents was on developing soft resilience. Training for developing community resilience cannot be attained through the development of one course but rather will involve multiple training courses and resources. One group of researchers defined resilience as a process of adapting to adversity through reliance on four key resources and their interactions: economic development, social capital, information and communication and community competence (Norris et al. 2008). Norris and her team identified five inventions that could help build disaster-resilient communities: 1) develop economic resources and attend to areas of greatest social vulnerability; 2) engage local people meaningfully in every step of mitigation process; 3) foster inter-organizational relationships; 4) inventions are needed that boost and protect naturally occurring social supports; and 5) communities must build trusted sources of information and communication resources that function in the face of unknowns.



Post Tsunami - American Samoa - September 30, 2009
Photo Credit: Peter Gurr

5.0 CONCLUSION

The mission of the NDPTC is to “develop and deliver disaster preparedness training to governmental, private, and non-profit entities, incorporating urban planning with an emphasis on community preparedness and at risk populations.” The first step to ascertain the training needs was to conduct a training needs assessment and determine the extent of need in the area of natural hazards. The 2009 NDPTC Training Needs Assessment revealed an extensive need for training in multiple aspects of community preparedness in natural disaster assessment, mitigation and recovery. The frequency and high profile of recent natural disasters have resulted in a growing concern about natural disaster preparedness, response and recovery among emergency responders and the general public. A key finding of the needs assessment was that there are significant unmet training needs in the area of natural disasters. The survey respondents indicated the overall top three general unmet training needs were related to natural disaster response, recovery and protection. The focus group and interview respondents emphasized a wide variety of training needs for natural disasters. These needs range from training on risk assessment, mitigation, and response, to recovery. There was also an expressed need to increase awareness of natural hazards at all levels of government and the public.

6.0 END NOTES

- ¹ Gaynor, Jeff (2007) "Critical Infrastructure from a Private Viewpoint." *Defense Management Journal*, no. 36, (2007). [http://www.defencemanagement.com/article.asp?id=249&content_name=Homeland%20 Security&article=7463](http://www.defencemanagement.com/article.asp?id=249&content_name=Homeland%20Security&article=7463).
- ² Kahan, Jerome H., Allen, Andrew C., and George, Justin K. (2009) "An Operational Framework for Resilience," *Journal of Homeland Security and Emergency Management*: Vol. 6 : Iss. 1, Article 83.
- ³ Mileti, Dennis (2009) *Disasters by Design: A Reassessment of Natural Hazards in the United States* (Washington, D.C.: Joseph Henry Press).
- ⁴ Norris, Fran H., and Susan P. Stevens, Betty Pfefferbaum, Karen F. Wyche, Rose I. Pfefferbaum. 2008. "Community Resilience as a Metaphor, Theory, Set of Capacities, and Strategy for Disaster Readiness." *American Journal of Community Psychology* 41:127-150.
- ⁵ U.S. Department of Homeland Security, *Risk Steering Committee; DHS Risk Lexicon*, Washington, D.C., September 2008, pp. 23-24.

7.0 APPENDIX A: QUESTIONNAIRE



NATIONAL DISASTER PREPAREDNESS TRAINING CENTER UNIVERSITY OF HAWAII Needs Assessment Questionnaire

The purpose of this survey is to identify the training needs of those in the community concerned with disaster preparedness, response and recovery. Your answers will help guide the development and delivery of all hazards training.

Please mail completed survey to: NDPTC•2424 Maile Way, Honolulu 96822

Note: survey can be completed online you may access the survey at the following link: <http://surveys.socialsciences.hawaii.edu/ndptc-survey/ndptc.cfm>.

1. What is your job title? _____

2. What is your area of responsibility?

<input type="checkbox"/> City	<input type="checkbox"/> County	<input type="checkbox"/> State	<input type="checkbox"/> Federal
<input type="checkbox"/> Other (Please specify)			

3. Where is your area of responsibility located?

<input type="checkbox"/> Hawaii	<input type="checkbox"/> Guam	<input type="checkbox"/> CNMI	<input type="checkbox"/> RMI
<input type="checkbox"/> FSM	<input type="checkbox"/> American Samoa	<input type="checkbox"/> Oregon	<input type="checkbox"/> Washington

4. What is your primary discipline? (Mark only one answer)

<input type="checkbox"/> Coastal Zone Management	<input type="checkbox"/> Emergency Management	<input type="checkbox"/> Emergency Medical Services (EMS)
<input type="checkbox"/> Federal Responders	<input type="checkbox"/> Fire Services	<input type="checkbox"/> Flood Management
<input type="checkbox"/> Government Administrative	<input type="checkbox"/> Hazardous Materials	<input type="checkbox"/> Health Care
<input type="checkbox"/> Law Enforcement	<input type="checkbox"/> Planning	<input type="checkbox"/> Public Safety Communications
<input type="checkbox"/> Public Health	<input type="checkbox"/> Public Utilities	<input type="checkbox"/> Public Works

5. What is your primary level of responsibility? (Mark only one answer)

<input type="checkbox"/> Senior Management	<input type="checkbox"/> Line Supervisor	<input type="checkbox"/> Emergency Responder
<input type="checkbox"/> Elected Official	<input type="checkbox"/> Volunteer	
<input type="checkbox"/> Other (Please specify)		

6. Does your agency require or expect you to complete annual training for homeland security, emergency preparedness and/or natural disasters?

<input type="checkbox"/> Yes	<input type="checkbox"/> No
------------------------------	-----------------------------

7. What type(s) of certification or credit are you required to obtain? (Mark all that apply)

<input type="checkbox"/> Continuing Education Units (CEU)	<input type="checkbox"/> College credit
<input type="checkbox"/> In Service Hours	<input type="checkbox"/> Not required to obtain certificate or credit
<input type="checkbox"/> Other: (specify)	

8. How important is it to you for a training course to offer certification or credit? (Mark only one answer)

<input type="checkbox"/> Not at all important	<input type="checkbox"/> Somewhat important
<input type="checkbox"/> Important	<input type="checkbox"/> Very important

9. On average, how many times a year do you receive all hazards training? (Mark only one answer)

<input type="checkbox"/> Less than once a year	<input type="checkbox"/> Once a year
<input type="checkbox"/> Two to three times a year	<input type="checkbox"/> Four to five times a year
<input type="checkbox"/> More than five times a year	

7.0 APPENDIX A: QUESTIONNAIRE

10. Indicate the type of training(s) you prefer to attend. (Mark all that apply)

<input type="checkbox"/> Training that requires no travel	<input type="checkbox"/> Training that requires travel within my jurisdiction
<input type="checkbox"/> Training that requires travel outside my state	
<input type="checkbox"/> Training that requires travel outside of my jurisdiction but within my state	

11. Indicate the sources that you use to identify available training courses. (Mark all that apply)

<input type="checkbox"/> Professional/trade associations	<input type="checkbox"/> Conferences or expositions
<input type="checkbox"/> Agency head and/or training coordinator	<input type="checkbox"/> U.S. Department of Homeland Security/FEMA
<input type="checkbox"/> State agencies	<input type="checkbox"/> Local agencies
<input type="checkbox"/> Word of mouth/social networking	<input type="checkbox"/> Local colleges or universities
<input type="checkbox"/> Other: (specify)	

12. Identify which of the following have provided the training(s) you have received within the last 24 months. (Mark all that apply)

<input type="checkbox"/> Local training provider	<input type="checkbox"/> State training provider
<input type="checkbox"/> Federal training provider	<input type="checkbox"/> Private training provider
<input type="checkbox"/> Other (please specify)	

13. What factors influence your decision to select a training option? (Mark all that apply)

<input type="checkbox"/> The training is required	<input type="checkbox"/> Dates and times of the training
<input type="checkbox"/> Topic of interest	<input type="checkbox"/> Location of the training
<input type="checkbox"/> Professional incentives	<input type="checkbox"/> Reputation of training provider or facility
<input type="checkbox"/> Cost	<input type="checkbox"/> Availability of certification or credit
<input type="checkbox"/> Desire to satisfy personal learning needs and goals	
<input type="checkbox"/> Other (specify)	

14. What, if any, of the following barriers prevent you from attending a training? (Mark all that apply)

<input type="checkbox"/> Reluctance to travel	<input type="checkbox"/> Cost of travel
<input type="checkbox"/> Cost of training	<input type="checkbox"/> Location of training
<input type="checkbox"/> Personal/family obligations	<input type="checkbox"/> Work obligations
<input type="checkbox"/> Relevance of training content	<input type="checkbox"/> Training format
<input type="checkbox"/> Dates and times of the course	<input type="checkbox"/> Lack of access to technology/other equipment
<input type="checkbox"/> Lack of professional incentive	<input type="checkbox"/> Cost of backfill in jurisdiction
<input type="checkbox"/> Lack of backfill in jurisdiction	<input type="checkbox"/> Required to use leave (e.g. compensatory, sick, or vacation)
<input type="checkbox"/> None of these barriers exist	<input type="checkbox"/> All of the above

15. Which technologies does your jurisdiction or agency possess to facilitate distance learning? (Mark all that apply)

<input type="checkbox"/> Computer	<input type="checkbox"/> High-speed Internet access
<input type="checkbox"/> Dial-up Internet access	<input type="checkbox"/> DVD player
<input type="checkbox"/> Videoconferencing	<input type="checkbox"/> Satellite downlink capabilities
<input type="checkbox"/> Interactive television (ITV)	<input type="checkbox"/> Personal Digital Assistants (PDAs)
<input type="checkbox"/> Other (specify)	
<input type="checkbox"/> None of these technologies	

7.0 APPENDIX A: QUESTIONNAIRE

16. Indicate the delivery format(s) of the training you have received during the last 24 months and the delivery format(s) in which you prefer to receive training? (Mark all that apply)

	Have Received	Prefer to Receive
Group or team training		
CD-Rom or DVD		
Online (e.g., Web stream, Webcast, Webinar)		
Hands-on training		
Table-top exercise		
Classroom-based training (e.g., lecture, seminar, workshop)		
Correspondence course		
Videoconferencing		
Other (specify)		

17. Using the scale provided below, please indicate your agency's level of preparedness for each of the following major events. These events are based on the U.S. Department of Homeland Security's National Planning Scenarios which were developed for use in national, Federal, State and local Homeland Security preparedness activities. These scenarios illustrate the potential scope, magnitude, and complexity of a range of threats or hazards of national significance with high consequence. (Circle a score for each event that represents your agency's level of preparedness)

	1 = Not At All Prepared 2 = Somewhat Prepared 3 = Prepared 4 = Well-Prepared 5 = Extremely Well-Prepared				
	1= Not At All Prepared	2= Somewhat Prepared	3= Prepared	4= Well Prepared	5= Extremely Well Prepared
Aerosol Anthrax Release	1	2	3	4	5
Cyber Attack	1	2	3	4	5
Earthquake	1	2	3	4	5
Explosive Device Detonation	1	2	3	4	5
Flood	1	2	3	4	5
Food Contamination	1	2	3	4	5
Hurricane/Typhoon	1	2	3	4	5
Pandemic Outbreak	1	2	3	4	5
Toxic Chemical Release	1	2	3	4	5
Tsunami	1	2	3	4	5
Volcano	1	2	3	4	5

18. What length of training do you most prefer? (Mark only 1 answer)

One day	2-3 days
4-5 days	Other (#)

19. In the following table, please mark the cells that reflect the three areas of training you believe are most important for a person in your position. (Mark only 3 cells)

Training Type	Prevention	Protection	Response	Recovery
Natural Disaster				
Pandemic/Other Health related Outbreak				
Technological Catastrophe				
Terrorism				

7.0 APPENDIX A: QUESTIONNAIRE

20. The Target Capabilities List (TCL), developed by the U.S. Department of Homeland Security, identifies and defines capabilities that the Nation may need to achieve and sustain, depending on relevant risks and threats, in order to prevent, protect against, respond to, and recover from major events.

For each of the target capabilities listed, we would like to know:

- A. Have you received training in the last 24 months related to this capability?
 B. Is it important for you to possess knowledge and skills that relate to this capability?
 C. Are you confident in your ability to perform tasks that relate to this capability.

(For each target capability, mark YES or NO to best represent your answer)											
TARGET CAPABILITY For each target capability, check yes or no to best represent your answer	Have you received training in the last 24 months related to this capability?		Is it important for you to possess knowledge and skills that relate to this capability for your job		Are you confident in your ability to perform tasks that relate to this capability?						
Common Target Capabilities											
Planning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Communications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Community Preparedness & Participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Risk Management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intelligence and Information Sharing and Dissemination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prevention Mission Area											
Information Gathering / Recognition of Indicators and Warning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Protection Mission Area											
Critical Infrastructure Protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Food/Agriculture Safety & Defense	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Epidemiological Surveillance & Investigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Response Mission Area											
On-site Incident Management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Emergency Operations Center Management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Critical Resource Logistics and Distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Volunteer Management and Donations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Responder Safety and Health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Emergency Public Safety and Security	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental Health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Citizen Evacuation and Shelter In-Place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Isolation and Quarantine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Search and Rescue (Land-Based)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Emergency Public Information Warning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Emergency Triage and Pre-Hospital Treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Medical Surge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Medical Supplies Management and Distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mass Prophylaxis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mass Care (Sheltering, Feeding, and Related Service)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fatality Management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recovery Mission Area											
Structural Damage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restoration of Lifelines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Economic and Community Recovery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>